

### REMARKS

Favorable reconsideration of this application, as amended, is respectfully requested.

In the replacement sheets of drawings submitted herewith, Figs. 23(a), 23(b), 24, 25, and 26 have been designated as "background art". These figures relate to the development of the present invention and are not admitted prior art.

Independent Claims 28 and 33 have been amended to clarify the manner in which these claims distinguish patentably from the prior art, including Prasad (U.S. 5,268,315) relied upon in the rejection under 35 U.S.C. § 102(b) (which should refer to Claim 36, rather than Claim 37, which was merely objected to).

Claim 28 now recites, *inter alia*:

d) forming a first conductive film having a first portion and a second portion in the second and third regions, respectively; and

(e) forming a first wiring and a second wiring electrically connected to the second portion of the first conductive film;

wherein the first portion of the first conductive film and the first semiconductor layer of the Schottky diode have a Schottky contact; and

the first and second portions of the first conductive film are a Schottky electrode of the Schottky diode and a resistance film of the resistance element, respectively.

Independent Claim 33 now recites, *inter alia*:

(e) forming a first conductive film having a first portion and a second portion in the second and third regions respectively;

(f) forming a first wiring and a second wiring electrically connected to the second portion of the first conductive film;

wherein the collector layer of the bipolar transistor and the first semiconductor layer of the Schottky diode are made of a same layer;

the first portion of the first conductive film and the first semiconductor layer of the Schottky diode have a Schottky contact; and

the first and second portions of the first conductive film are a Schottky electrode of the Schottky diode and a resistance film of the resistance element, respectively.

To assist the Office in understanding the independent claims, as well as the claims dependent thereon, two sheets of drawings are appended hereto showing marked-up versions of Figs. 9 and 10. The marked-up figures are merely illustrative and are in no respect intended to limit the claims referred to.

In the inventions recited in Claims 28 and 33, first and second portions of a first conductive film are formed when the first conductive film is formed. The first and second portions of the first conductive film are a Schottky electrode of a Schottky diode and a resistance film of a resistance element, respectively. Thus the Schottky

electrode of the Schottky diode and the resistance film of the resistance element are formed at the same time from the same material (see, without limitation, page 33, lines 5-16 of the specification). By virtue of the invention, the number of steps can be reduced, so that the manufacturing cost of a semiconductor device can be reduced (see page 36, lines 16-22 of the specification).

In the device of Prasad, relied upon in the rejection under 35 U.S.C. § 102(b), layer 76 is a NiCr resistor (col. 6, lines 27-30, Fig. 6); and layer 87 is a Schottky diode anode (col. 6, lines 61-62, Fig. 11). In this device, the resistor and the Schottky diode anode are not formed in a same step. Layer 86 of Prasad does not correspond to the resistance film recited in Claims 28 and 33. Actually, layer 36 is used as a terminal of the NiCr resistor.

It is apparent that independent Claims 28 and 33, as well as the claims dependent thereon, distinguish patentably from Prasad and should be allowed.

This application is now believed to be in condition for allowance.


The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and

has not been requested separately, such extension is hereby requested.

Respectfully submitted,

NHS:jab

Miles & Stockbridge P.C.  
1751 Pinnacle Drive, Suite 500  
McLean, Virginia 22102-3833  
(703) 903-9000

By:   
Nelson H. Shapiro  
Reg. No. 17,095

August 23, 2004